

Abstract

Disclosed is a method for structuring a planar substrate composed of a glasslike material.

The invented method is distinguished by a combination of the following method steps:

- provision of a semiconductor planar substrate composed of a semiconductor material,
- reduction of the thickness of the semiconductor planar substrate inside at least one surface region of the semiconductor planar substrate in order to form a raised surface region in relation to the surface planar region of reduced thickness,
- structuring the raised surface region of the semiconductor planar substrate by means of local mechanical removal of material in order to place impressions inside the raised surface regions,
- joining the structured surface of the semiconductor planar substrate with the glasslike planar substrate in such a manner that the glasslike planar substrate at least partially covers the surface planar region of reduced thickness,
- tempering the joined planar substrates in such a manner that in a first tempering phase, which is conducted under vacuum conditions, the glasslike planar substrate covering the surface region of reduced thickness forms a fluid-tight bond with the surface region of reduced thickness, with the planar substrate covering the impressions in a fluid-tight manner under vacuum conditions, and that in a second tempering phase, at least partial areas of the glasslike material flow into the impressions of the structured surface of the semiconductor planar substrate.